

**DETAILED ACTION**

1. This Office Action is in response to the communication filed on July 18, 2008 which paper has been placed of record in the file. Claims 1-64 are pending in this application and have been examined.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 32-63 are rejected under 35 U.S.C. 101 because the claimed invention is directed to nonstatutory subject matter. Based on Supreme Court precedent, a method/process claim must (1) be tied to another statutory class of invention (such as a particular apparatus) (see at least *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing (see at least *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972)). A method/process claim that fails to meet one of the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject matter. Here claims 32-63 fail to meet the above requirements because the claims fail to tie in another statutory class of invention.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-65 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-5, 7-9, 17, 32-36, 38-40, 48, and 63-64** are rejected under 35 U.S.C. 102(e) as being anticipated by **Feingold et al. [US Pub No. 2003/0172017 A1]**.

6. Regarding **claim 1**, Feingold discloses an apparatus for use in a real-time financial market portfolio monitoring system, for continuously valuing a data collection comprising a first plurality of data items, the apparatus comprising: storage means for storing the first plurality of data items, said storage means further storing a second plurality of data items, each data item of the first plurality having assigned a respective one of the data items of the second plurality, each

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data item of the second plurality representing an individual data item value (0029). Feingold discloses an interface module for establishing data connections to receive input data (0016). Feingold discloses a processor for continuously updating data items of the second plurality stored in said storage means based upon the received input data, and calculating a data collection value for the data collection based on data item values of the updated data items (0030-0033). Feingold discloses wherein the apparatus further comprises: a controller for controlling said interface module to connect to one or more of at least two data sources to receive said input data (0016, 0038-0039).

7. Regarding **claim 2**, Feingold discloses wherein said data collection represents a portfolio of financial instruments, each data item of the first plurality comprises an identifier identifying at least one of said financial instruments, and the individual data item values represented by the data items of the second plurality indicate prices of the respective financial instruments (0029).

8. Regarding **claim 3**, Feingold discloses wherein said controller is adapted to control said interface module to change said data connections based on a time-driven schedule (0055).

9. Regarding **claim 4**, Feingold discloses wherein said controller is adapted to receive an input control signal to control said interface module to change said

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data connections in an event-driven manner based on said input control signal (0055).

10. Regarding **claim 5**, Feingold discloses wherein said processor is capable of continuously updating a data item of the second plurality based upon input data received substantially simultaneously from two or more data sources (0030-0033).

11. Regarding **claim 7**, Feingold discloses wherein each data item value represented by one of the data items of the second plurality is of one of at least two data item types, and said storage means further stores a third plurality of data items, each data item of the second plurality having assigned a respective one of the data items of the third plurality, each data item of the third plurality identifying the data item type relating to the data item value represented by the corresponding data item of the second plurality (0031).

12. Regarding **claim 8**, Feingold discloses wherein said processor is capable of calculating said data collection value based on data item values of different types (0031).

13. Regarding **claim 9**, Feingold discloses wherein said input data comprises value information and unit information, and said processor is capable of converting values of different units into corresponding values of a predefined unit

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by applying appropriate conversion factors, before calculating said data collection value (0031).

14. Regarding **claim 17**, Feingold discloses wherein said storage means further stores amount data indicating an individual amount assigned to each of said data items of the first plurality (0029).

15. Regarding **claim 32**, this claim recites similar language as to claim 1 and is rejected on the same grounds.

16. Regarding **claim 33**, this claim recites similar language as to claim 2 and is rejected on the same grounds.

17. Regarding **claim 34**, this claim recites similar language as to claim 3 and is rejected on the same grounds.

18. Regarding **claim 35**, this claim recites similar language as to claim 4 and is rejected on the same grounds.

19. Regarding **claim 36**, this claim recites similar language as to claim 5 and is rejected on the same grounds.

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20. Regarding **claim 38**, this claim recites similar language as to claim 7 and is rejected on the same grounds.

21. Regarding **claim 39**, this claim recites similar language as to claim 8 and is rejected on the same grounds.

22. Regarding **claim 40**, this claim recites similar language as to claim 9 and is rejected on the same grounds.

23. Regarding **claim 48**, this claim recites similar language as to claim 17 and is rejected on the same grounds.

24. Regarding **claims 63 and 64**, each of these claims recite similar language as to claim 1 and are rejected on the same grounds.

***Claim Rejections - 35 USC § 103***

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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26. Claims **6 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Matus et al. [US Pub No. 2003/0233309 A1]**.

27. Regarding **claim 6**, Feingold does not explicitly disclose wherein said processor is further arranged to perform a calculation algorithm upon input data received from said two or more data sources. However Matus teaches the user can calculate what values the remaining fields would have based on this transaction percentage. A different transaction percentage can be input or a value can be input into a different field (such as the shares field independent of the transaction percentage) and the values of the remaining fields can be calculated. [0042]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Matus to obtain invention as specified in claim 6. The rationale to combine the teachings would be for 0simultaneously providing values related to the identifier.

28. Regarding **claim 37**, this claim recites similar language as to claim 6 and is rejected on the same grounds.

29. Claims **10-11 and 41-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Black et al. [US Patent No. 6,012,042]**.

30. Regarding **claim 10**, Feingold does not explicitly disclose wherein said input data comprises value information, and said processor is capable of determining unit information for the received value information dependent on the respective data source or sources where said input data is received from, and converting values of different units into corresponding values of a predefined unit by applying appropriate conversion factors, before calculating said data collection value. However Black teaches an improved securities analysis system includes a data conversion device for converting both technical and fundamental data about a security into a unified format for analysis by an analysis process engine.

[Abstract]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Black to obtain invention as specified in claim 10. The rationale to combine the teachings would be for transforming data into a unified format for analysis by an analysis process engine.

31. Regarding **claim 11**, Feingold does not explicitly disclose wherein said input data further comprises rate information indicating said conversion factors. However Black teaches an improved securities analysis system includes a data conversion device for converting both technical and fundamental data about a security into a unified format for analysis by an analysis process engine. The analysis process engine processes the disparate data in accordance with a set of



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rules and the results are forwarded to a display for viewing or used in further analysis. [Col. 13 lines 32-42]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Black to obtain invention as specified in claim 11. The rationale to combine the teachings would be for transforming data into a unified format for analysis by an analysis process engine.

32. Claims **12** and **43** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Black et al. [US Patent No. 6,012,042]**, and further in view of **Brandenburg et al. [US Pub No. 2006/0077904 A1]**.

33. Regarding **claim 12**, Feingold does not explicitly disclose wherein said interface module is capable of establishing different data connections to receive said value information and said rate information. However Brandenburg teaches processing of data packets from different data connections with different transmission bit rates. [0011]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Brandenburg to obtain invention as specified in claim 12. The rationale to combine the teachings is to more efficiently transfer data.

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34. Regarding **claim 43**, it recites similar language as to claim 12 and is rejected on the same grounds.
35. Claims **13** and **44** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Black et al. [US Patent No. 6,012,042]**, and further in view of **Wang [US Patent No. 7,305,422]**.
36. Regarding **claim 13**, Feingold does not explicitly disclose wherein said processor is arranged to update said data items of the second plurality based upon received rate information even if no value information is received, and recalculate said data collection value based on data item values of the updated data items. However Wang discloses a program that performs computationally intensive calculations uses a particular piece of data that is stored as a data item in a database. Using the techniques described herein, the calculations may be performed as a transaction within a database server that manages the data item. During the execution of the calculations, the server may perform a series of updates to this data item. Prior to each update of the data item, the database server generates a record that reflects the state of the data item. During subsequent phases of the calculations, the calculations may require previous values of the data item. [Col. 2 lines 16-28]
- At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of

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Wang to obtain invention as specified in claim 13. The rationale to combine the teachings would be for effective processing of computationally intensive calculations.

37. Regarding **claim 44**, it recites similar language as to claim 13 and is rejected on the same grounds.

38. Claims **14, 16, 45** and **47** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Vishnubhotla [US Pub No. 2004/0010505 A1]**.

39. Regarding **claim 14**, Feingold does not explicitly disclose wherein said processor is adapted to calculate said data collection value also based on at least one estimation value obtained by applying a predefined value determination algorithm, in case a data item value is not available. However Vishnubhotla discloses predefined data mining algorithms comprise a radial basis function algorithm for value prediction and the production scored data comprises a prediction field containing a value calculated by executing the data mining algorithm in scoring mode. [Page 14, claim 12]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Vishnubhotla to obtain invention as specified in claim 14. The rationale to

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combine the teachings is to make the process more efficient and more consistent.

40. Regarding **claim 16**, Feingold does not explicitly disclose wherein said processor is adapted to calculate said data collection value also based on at least one estimation value in case a data item value is not available, said estimation value being obtained from either a configuration file stored in said storage means or from received input data. a predefined value determination algorithm, in case a data item value is not available. However Vishnubhotla discloses predefined data mining algorithms comprise a radial basis function algorithm for value prediction and the production scored data comprises a prediction field containing a value calculated by executing the data mining algorithm in scoring mode. [Page 14, claim 12]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Vishnubhotla to obtain invention as specified in claim 16. The rationale to combine the teachings is to make the process more efficient and more consistent.

41. Regarding **claim 45**, it recites similar language as to claim 14 and is rejected on the same grounds.

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42. Regarding **claim 47**, it recites similar language as to claim 16 and is rejected on the same grounds.

43. Claims **15** and **46** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Vishnubhotla [US Pub No. 2004/0010505 A1]** and further in view of **Gershon [US Pub No. 2005/0027634 A1]**.

44. Regarding **claim 15**, Feingold does not explicitly disclose wherein said predefined value determination algorithm comprises an implementation of the Balck-Scholes formula. However Gershon teaches calculating a theoretical value (IV) using a combination of known algorithms, e.g., based on the Black-Scholes model [0057]. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings to obtain invention as specified in claim 15. The rationale to combine the teachings is because Black-Scholes model is the common benchmark in the industry for pricing derivatives.

45. Regarding **claim 46**, it recites similar language as to claim 15 and is rejected on the same grounds.

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46. Claims **18** and **49** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Naka et al. [US Pub No. 2002/0083238 A1]**.

47. Regarding **claim 18**, Feingold does not explicitly disclose wherein said processor is adapted to adjust the amount data of at least one data item in response to a corporate action. However Naka teaches a storing-reproducing apparatus with this structure is capable of automatically optimizing the bit rate in order to completely store target data in the available space in the storage medium [0035]. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Naka to obtain invention as specified in claim 18. The rationale to combine the teachings would be for improving the operability of the apparatus for the user.

48. Regarding **claim 49**, it recites similar language as to claim 18 and is rejected on the same grounds.

49. Claims **19** and **50** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Naka et al. [US Pub No. 2002/0083238 A1]** and further in view of **Nakajima et al. [US Pub No. 2002/0198870 A1]**.

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50. Regarding **claim 19**, Feingold does not disclose wherein said processor is adapted to determine a synthetic value of at least one data item of the second plurality by adjusting existing data item values in case of a corporate action, and calculate said data collection value also based on said synthetic value. However Nakajima teaches a result-of-search list page on the basis of the fitting value calculation target property information suite and a synthetic fitting value suite obtained by calculating the synthetic fitting values with respect to the respective pieces of property information that form the fitting value calculation target property information suite [0118]. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Nakajima to obtain invention as specified in claim 19. The rationale to combine the teachings is to easily determine a synthetic value.

51. Regarding **claim 50**, it recites similar language as to claim 19 and is rejected on the same grounds.

52. Claims **20-24** and **51-55** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Gotz et al. [US Pub No. 2004/0034699 A1]** hereinafter referred to as Gotz.

53. Regarding **claim 20**, Feingold does not explicitly disclose wherein said processor is adapted to apply a filter algorithm on the received input data before updating the data items of the second plurality, said filter algorithm being

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configured to enable said processor to block input data that would, after having updated data items of the second plurality, lead to data item values significantly deviating from respective previous data item values, or from predefined reference values. However Gotz discloses a filter condition is received from a user. The filter condition includes at least one value of an attribute occurring in one or more data collections in the first data management system and one or more data collections in the second data management system. A first group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the leading data management system. Each value extracted is associated with a data collection that meets the filter condition. A second group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the contrast data management system. The first group of values of the uniquely identifying attribute is compared with the second group of values of the uniquely identifying attribute to determine whether each value of the uniquely identifying attribute in the first group represents the same data collection as a value of the uniquely identifying attribute in the second group. [0022]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Gotz to obtain invention as specified in claim 20. The rationale to combine the teachings would be to more efficiently manage the integrity of data.



54. Regarding **claim 21**, Feingold does not explicitly disclose wherein said processor is adapted to apply a filter algorithm on calculated data collection values, said filter algorithm being configured to enable said processor to block a calculated data collection value that significantly deviates from a previous data collection value, or from a predefined reference value. However Gotz discloses a filter condition is received from a user. The filter condition includes at least one value of an attribute occurring in one or more data collections in the first data management system and one or more data collections in the second data management system. A first group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the leading data management system. Each value extracted is associated with a data collection that meets the filter condition. A second group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the contrast data management system. The first group of values of the uniquely identifying attribute is compared with the second group of values of the uniquely identifying attribute to determine whether each value of the uniquely identifying attribute in the first group represents the same data collection as a value of the uniquely identifying attribute in the second group. [0022]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Gotz to obtain invention as specified in claim 21. The rationale to combine the teachings would be to more efficiently manage the integrity of data.

55. Regarding **claim 22**, Feingold does not explicitly disclose an output module for outputting calculated data collection values to one or more recipients, wherein said processor is adapted to inhibit a blocked data collection value from being output. . However Gotz discloses a filter condition is received from a user. The filter condition includes at least one value of an attribute occurring in one or more data collections in the first data management system and one or more data collections in the second data management system. A first group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the leading data management system. Each value extracted is associated with a data collection that meets the filter condition. A second group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the contrast data management system. The first group of values of the uniquely identifying attribute is compared with the second group of values of the uniquely identifying attribute to determine whether each value of the uniquely identifying attribute in the first group represents the same data collection as a value of the uniquely identifying attribute in the second group. [0022]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Gotz to obtain invention as specified in claim 22. The rationale to combine the teachings would be to more efficiently manage the integrity of data.

56. Regarding **claim 23**, Feingold does not explicitly disclose an output module for outputting calculated data collection values to one or more recipients, wherein said processor is adapted to control said output module to output a blocked data collection value together with a flag indicating that the output data collection value is unconfirmed. However Gotz discloses a filter condition is received from a user. The filter condition includes at least one value of an attribute occurring in one or more data collections in the first data management system and one or more data collections in the second data management system. A first group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the leading data management system. Each value extracted is associated with a data collection that meets the filter condition. A second group of values of attributes that uniquely identify a single data collection from the other data collections is extracted from the contrast data management system. The first group of values of the uniquely identifying attribute is compared with the second group of values of the uniquely identifying attribute to determine whether each value of the uniquely identifying attribute in the first group represents the same data collection as a value of the uniquely identifying attribute in the second group. [0022]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Gotz to obtain invention as specified in claim 23. The rationale to combine the teachings would be to more efficiently manage the integrity of data.

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57. Regarding **claim 24**, Feingold does not explicitly disclose a user interface module connected to receive user input data indicative of instructions to change the blocking behaviour and/or adjust deviation limits of said filter algorithm. However Gotz teaches a filter condition may be user-definable. A filter condition may include one or more values for one or more attributes associated with a data collection or may include one or more values for an attribute that uniquely identifies a data collection. [0016]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Gotz to obtain invention as specified in claim 24. The rationale to combine the teachings would be to more efficiently manage the integrity of data.

58. Regarding **claim 51**, it recites similar language as to claim 20 and is rejected on the same grounds.

59. Regarding **claim 52**, it recites similar language as to claim 21 and is rejected on the same grounds.

60. Regarding **claim 53**, it recites similar language as to claim 22 and is rejected on the same grounds.

61. Regarding **claim 54**, it recites similar language as to claim 23 and is rejected on the same grounds.

62. Regarding **claim 55**, it recites similar language as to claim 24 and is rejected on the same grounds.

63. Claims **25-28** and **56-59** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Lipscher et al. [US Pub No. 2004/0102971 A1]**.

64. Regarding **claim 25**, Feingold does not explicitly disclose an output module for outputting calculated data collection values to one or more recipients, wherein said processor is adapted to convert calculated data collection values by applying appropriate unit conversion factors, before controlling said output module to output the values. However Lipscher teaches input may be any form of input produced by a human or communication form suitable for human-to-human communication. Examples may include voice, speech, gestures, handwriting, facial expression, or a drawing/sketch/schematic. Symbolic data are collections of values that can represent data in a computer. Examples may include words, phrases, letters, numbers, unicode symbols, values for database record, computer program variable values, and computer program variable addresses. Symbolic data output may be output by the system, stored by the system, displayed by the system, or transmitted to another system. However, the symbolic data and natural input may take various forms. Further, various conversions may be envisaged. [0031]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Lipscher to obtain invention as specified in claim 25. The rationale to combine the teachings would be for easily generating symbolic data from the input data.

65. Regarding **claim 26**, Feingold does not explicitly disclose wherein said processor is configured to apply multiple unit conversion factors for different currencies to calculate multiple data collection values for individual recipients. . However Lipscher teaches input may be any form of input produced by a human or communication form suitable for human-to-human communication. Examples may include voice, speech, gestures, handwriting, facial expression, or a drawing/sketch/schematic. Symbolic data are collections of values that can represent data in a computer. Examples may include words, phrases, letters, numbers, unicode symbols, values for database record, computer program variable values, and computer program variable addresses. Symbolic data output may be output by the system, stored by the system, displayed by the system, or transmitted to another system. However, the symbolic data and natural input may take various forms. Further, various conversions may be envisaged. [0031]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Lipscher to obtain invention as specified in claim 26. The rationale to combine the teachings would be for easily generating symbolic data from the input data.

66. Regarding **claim 27**, Feingold does not explicitly disclose wherein said input data comprises rate information enabling said processor to determine said unit conversion factors. However Lipscher teaches input may be any form of input produced by a human or communication form suitable for human-to-human communication. Examples may include voice, speech, gestures, handwriting, facial expression, or a drawing/sketch/schematic. Symbolic data are collections of values that can represent data in a computer. Examples may include words, phrases, letters, numbers, unicode symbols, values for database record, computer program variable values, and computer program variable addresses. Symbolic data output may be output by the system, stored by the system, displayed by the system, or transmitted to another system. However, the symbolic data and natural input may take various forms. Further, various conversions may be envisaged. [0031]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Lipscher to obtain invention as specified in claim 27. The rationale to combine the teachings would be for easily generating symbolic data from the input data.

67. Regarding **claim 28**, Feingold does not explicitly disclose a user interface module connected to receive user input data indicative of instructions to change at least one of said unit conversion factors. However Lipscher teaches input may be any form of input produced by a human or communication form suitable for human-to-human communication. Examples may include voice, speech,

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gestures, handwriting, facial expression, or a drawing/sketch/schematic.

Symbolic data are collections of values that can represent data in a computer.

Examples may include words, phrases, letters, numbers, unicode symbols, values for database record, computer program variable values, and computer program variable addresses. Symbolic data output may be output by the system, stored by the system, displayed by the system, or transmitted to another system. However, the symbolic data and natural input may take various forms. Further, various conversions may be envisaged. [0031]

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Lipscher to obtain invention as specified in claim 28. The rationale to combine the teachings would be for easily generating symbolic data from the input data.

68. Regarding **claim 56**, it recites similar language as to claim 25 and is rejected on the same grounds.

69. Regarding **claim 57**, it recites similar language as to claim 26 and is rejected on the same grounds.

70. Regarding **claim 58**, it recites similar language as to claim 27 and is rejected on the same grounds.



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71. Regarding **claim 59**, it recites similar language as to claim 28 and is rejected on the same grounds.
72. Claims **29-31** and **60-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feingold et al. [US Pub No. 2003/0172017 A1]** in view of **Odenwalder et al. [US Pub No. 2003/0031149 A1]**.
73. Regarding **claim 29**, Feingold does not explicitly disclose wherein said processor is adapted to recalculate previously calculated data collection values based on correction data indicating at least one corrected data item value of the second plurality. However Odenwalder discloses a receiving device includes means for receiving a transmission over at least one time slot, the transmission comprising data and a value calculated from the data, recalculation means for recalculating the value from the received data, and determination means for determining the number of time slots of the transmission from the calculated and recalculated values [0013]. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Odenwalder to obtain invention as specified in claim 29. The rationale to combine the teachings would be for proactively correcting calculated values.
74. Regarding **claim 30**, Feingold does not explicitly disclose wherein said correction data is comprised in said input data. However Odenwalder discloses

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a receiving device includes means for receiving a transmission over at least one time slot, the transmission comprising data and a value calculated from the data, recalculation means for recalculating the value from the received data, and determination means for determining the number of time slots of the transmission from the calculated and recalculated values [0013]. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Odenwalder to obtain invention as specified in claim 30. The rationale to combine the teachings would be for proactively correcting calculated values.

75. Regarding **claim 31**, Feingold does not explicitly disclose a user interface module connected to receive user input data indicative of said correction data. However Odenwalder discloses a receiving device includes means for receiving a transmission over at least one time slot, the transmission comprising data and a value calculated from the data, recalculation means for recalculating the value from the received data, and determination means for determining the number of time slots of the transmission from the calculated and recalculated values [0013]. At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the disclosure of Feingold to include the teachings of Odenwalder to obtain invention as specified in claim 31. The rationale to combine the teachings would be for proactively correcting calculated values.

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76. Regarding **claim 60**, it recites similar language as to claim 29 and is rejected on the same grounds.

77. Regarding **claim 61**, it recites similar language as to claim 30 and is rejected on the same grounds.

78. Regarding **claim 62**, it recites similar language as to claim 31 and is rejected on the same grounds.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN POE whose telephone number is (571)272-9789. The examiner can normally be reached on Monday-Friday 9:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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